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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/755,472

01/13/2004

Joon-Woo Kim

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EXAMINER

RIGGLEMAN, JASON PAUL

ART UNIT

PAPER NUMBER

1792

NOTIFICATION DATE

DELIVERY MODE

05/02/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/755,472	Applicant(s) KIM ET AL.	
	Examiner JASON P. RIGGLEMAN	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,8 and 16-36 is/are pending in the application.
- 4a) Of the above claim(s) 27-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8 and 16-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/11/2008 has been entered.

Election/Restrictions

2. Newly submitted claims 27-36 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the new claims are drawn to a washing machine and/or a control unit which are both apparatuses which can be used to perform a different method. The original claims were drawn to a method.

3. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 27-36 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Status of Claims

4. Applicant's reply filed on 2/11/2008 is acknowledged. Current pending claims are 1, 3-5, 8, and 16-36. Claims 1, 17, and 19-20 are amended. Claims 21-36 are new.

Claims 2, 6-7, and 9-15 are cancelled. Claims 27-36 are withdrawn as being drawn to a non-elected invention (by original presentation).

Response to Arguments

5. The applicant's arguments have been reviewed. They are not persuasive with regards to the 112, first paragraph, rejections of the claims for new matter. The rejections are maintained. While the applicant repeatedly points to various parts of the specification for "support" of the new claim language -- no pieces can actually be quoted as providing the support. The applicant has attempted to incorporate into the claims the idea that the torque-speed curves of Fig. 4 are performance based and are related to steps S15 to S16 in Fig. 2; however, this is not supported by the original disclosure. From the disclosure, Fig. 4 appears to be for informational purposes to describe the empirical relationship between torque, voltage, and speed. Further, it is not clear from the specification how laundry amount is involved in step (S12) since the disclosure contradicts itself --- see pg. 6, Lines 4-7 vs. pg. 6, Lines 18-22.

6. Note: The applicant argues "the user of the dryer selects a dehydration speed and inputs that speed in step S12 -- see pages 2 and 3 of the originally filed specification" is not convincing since this portion of the specification discusses the state of the prior art (Fig. 2 concerns the applicant's invention). The paragraph bridging pgs. 11-12 of applicant's arguments are not understood.

7. In regards to the rejections of claims 17-20, the applicant argues where Fig. 2 shows "400<Dehydration Speed<800" teaches 3 speeds because the dehydration speed consists of an "intermediate range of speeds there between". Even, if this were

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true, it would not correct the problem of claims 18-20. In claims 18-20, the applicant is claiming that a set speed is 400 RPM with the other two speeds of 600 RPM and 800 RPM in this range; however, a review of the specification indicates that **each of the 3 speeds** can be the set input speed by the user and has a *natural* variation (range) sensed as improperly shown in between steps S12 and S13 of Fig. 2 and see pg. 8, Lines 14-21.

Specification

8. The disclosure is objected to because of the following informalities: the relationship of the laundry amount determination to the flow chart of Fig. 2 is not understood. How is the laundry amount changing the dehydration speed? Also, pg. 6 (Lines 17-24) of the specification are not understood -- the applicant's explanation of this section is not understood.

Appropriate correction is required. No new matter should be entered.

Drawings

9. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the manipulative method steps claimed in claims 18-20, and the controlling according to amount of laundry in claims 1 and 21, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

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prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 1, 3-5, 8, and 16-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

12. In regards to claim 1, "determining performance evaluating motor torque-speed curves for multiple dehydration speeds in the established range" and "controlling a

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rotation speed of the motor of the washing machine for the amount of laundry in the washing machine by controlling the phase of the motor voltage phase control circuit in accordance with the performance evaluating torque-speed curves” is not contained in the original disclosure.

13. In regards to claim 8, “the performance evaluating motor torque-speed curves are calculated on the basis of the sensed amount of laundry in the washing machine” is new matter.

14. In regards to claim 16, “the motor voltage phase control circuit has fire angles and the step of controlling the motor voltage phase control circuit in accordance with the performance evaluating torque-speed curves” is new matter.

15. The established range consisting of three speeds, claims 17-20, is new matter.

16. In regards to claim 21, “controlling, by the controller, a number of poles of the motor to operate at a first range of dehydration speeds or a second range of dehydration speeds according to the sensed amount of laundry items” is new matter.

Response to Amendments

17. Applicant's amendments filed on 2/11/2008 are acknowledged. In view of the amendments, the drawing objection and 112, second paragraph, rejections are withdrawn.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dumbser (UK Patent Application Publication No. GB2087933A)

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and Blazek et al. (US Patent No. 6531801) which teaches details of a pole-changing motor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON P. RIGGLEMAN whose telephone number is (571)272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art Unit 1792

Jason P Riggleman
Examiner
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/J. P. R./
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